

 <p style="text-align: center;">United States Environmental Protection Agency Washington, DC 20460</p> <p style="text-align: center;">Interagency Agreement/ Amendment</p> <p style="text-align: center;">Part 1 - General Information</p>		1. EPA IA Identification Number DW-14-95820201 - 0		2. Funding Location by Region EPA R5					
		3. Other Agency IA ID Number (if known)		4. Awarding Office IASSC West					
		5. Type of Action New		6. IA Specialist: Yvette Downs 206-553-6321 Downs.Yvette@epa.gov					
7. Name and Address of EPA Organization US Environmental Protection Agency IASSC West 1200 Sixth Avenue, Suite 900, OMP-145 Seattle, WA 98101			8. Name and Address of Other Agency Department of the Interior Midwest Region FWS / Midwest Region 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458						
9. DUNS: 029128894		10. BETC: DISB		11. DUNS: 151157950					
12. BETC: COLL									
13. Project Title and Description Great Lakes Restoration Initiative (GLRI) - U.S. Fish and Wildlife Service (USFWS) Complete the development of the GLRI Action Plan and implement priority programs, projects and activities to protect, restore and maintain the Great Lakes Ecosystem.									
14. EPA Project Officer (Name, Address, Telephone Number) Danielle Green 77 West Jackson Blvd. (G-17J) Chicago, IL 60604-3507 312-886-7594 E-Mail: Green.Danielle@epamail.epa.gov FAX: 312-697-2519			15. Other Agency Project Officer (Name, Address, Telephone) Charles Wooley FWS / Midwest Region 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458 612-713-5304 E-Mail: charles_wooley@fws.gov FAX: 612-713-5284						
16. Project Period: 04/10/2012 to 04/09/2016			17. Budget Period: 04/10/2012 to 04/09/2016						
18. Scope of Work (See Attachment) Scope of Work Attached.									
19. Employer/Tax ID No. 520852695		20. CAGE No: 347A4		21. ALC: 68-01-0727					
22. Statutory Authority for Transfer of Funds and Interagency Agreement Clean Water Act: Sec. 104(b)(2); Consolidated Appropriations Act, 2012; Public Law 112-74					23. Other Agency Type Federal Agency				
24. Revise Reimbursable Funds and Direct Fund Cites (only complete if applicable)									
	Previous Funding		This Action		Amended Total				
Revise Reimbursable (in-house)					0				
Direct Fund Cite (contractor)					0				
Total					0				
	Previous Amount		Amount This Action		Total Amount				
25. EPA Amount			\$43,631,309		\$43,631,309				
26. EPA In-Kind Amount					\$0				
27. Other Agency Amount			\$0		\$0				
28. Other Agency In-Kind Amount					\$0				
29. Total Project Cost			\$43,631,309		\$43,631,309				
30. Fiscal Information									
Treas. Symbol	DCN	FY	Appropriation	Budget Org	PRC	Object Class	Site/Project	Cost Org	Ob/De-Ob Amt
681/30108	1205HDX003	1213	B	05HN0	202BJ7XF1	2506			3,140,000
681/30108	1205HDX003	1213	B	05HN0	202BJ7XF2	2506			8,700,000
681/30108	1205HDX003	1213	B	05HN0	202BJ7XF4	2506			22,681,570

Fiscal (Continued)									
Treas. Symbol	DCN	FY	Appropriation	Budget Org	PRC	Object Class	Site/Project	Cost Org	Ob/De-Ob Amt
681/30108	1205HDX003	1213	B	05HN0	202BJ7XF5	2506	-	-	150,000
681/30108	1205HDX003	1213	B	05HN6	202BJ7XF2	2506	-	-	8,959,739
									43,631,309

Part II - Approved Budget				EPA IAG Identification Number DW-14-95820201 - 0
31. Budget Categories	Itemization of All Previous Actions	Itemization of This Action	In-Kind Itemization of This Action	Itemization of Total Project Cost to Date
(a) Personnel		\$4,807,574		\$4,807,574
(b) Fringe Benefits		\$1,353,858		\$1,353,858
(c) Travel		\$1,121,245		\$1,121,245
(d) Equipment		\$2,150,207		\$2,150,207
(e) Supplies				\$0
(f) Procurement / Assistance		\$31,571,086		\$31,571,086
(g) Construction				\$0
(h) Other		\$1,318,970		\$1,318,970
(i) Total Direct Charges	\$0	\$42,322,940	\$0	\$42,322,940
(j) Indirect Costs:	\$0	\$1,308,369		\$1,308,369
Charged - Amount Rate: 3% Base: \$42,322,940.00 Not Charged: Funds-Out: Not charged by Other Agency Estimate by other Agency Amount \$				
(k) Total (EPA Share 100.00 %) (Other Agency Share 0.00 %)	\$0	\$43,631,309	\$0	\$43,631,309
32. How was the IDC Base calculated? Indirect costs were calculated consistent with the Fish and Wildlife Service policy (3%) and responsibilities for cost recovery and cost allocation (http://www.fws.gov/policy/264fw1.html).				
33. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA funds? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Identify all equipment costing \$1,000 or more)				
34. Are any of these funds being used on extramural agreements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Type of Extramural Agreement Grant ; Contract				
Contractor/Recipient Name (if known)	Total Extramural Amount Under This Project		Percent Funded by EPA (if known)	
Various	31571086 Total \$ 31,571,086.00		100	
Part III - Funding Methods and Billing Instructions				
35.	(Note: EPA Agency Location Code (ALC) - 68010727)			
<input checked="" type="checkbox"/> Disbursement Agreement	Request for repayment of actual costs must be itemized on SF 1080 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002:			
<input checked="" type="checkbox"/> Repayment	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Upon Completion of Work			
<input type="checkbox"/> Advance	Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002.			
<input type="checkbox"/> Allocation Transfer-Out	Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hqtrs. Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460.			
36. <input type="checkbox"/> Reimbursement Agreement	<input type="checkbox"/> Repayment <input type="checkbox"/> Advance			
<input type="checkbox"/> Allocation Transfer-In				
Other Agency's Billing Address (include ALC or Station Symbol Number)			Other Agency's Billing Instructions and Frequency	

Part IV - Acceptance Conditions

EPA Identification Number

DW-14-95820201 - 0

37. Terms and Conditions, when included, are located at the end of the 1610-1, or as an attachment.

Part V - Offer and Acceptance

Note: A) For Fund-out actions, the agreement/amendment must be signed by the other agency official in duplicate and one original returned to the Grants and IA Management Division for Headquarters agreements or to the appropriate EPA Regional IA administration office within 3 calendar weeks after receipt or within any extension of time that may be granted by EPA. The agreement/amendment must be forwarded to the address cited in item 29 after acceptance signature.

Failure to return the properly executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement/amendment by the other agency after the document is signed by the EPA Award Official, which the Award Official determines to materially alter the agreement/amendment, shall void the agreement/amendment.

B) For Funds-In actions, the other agency will initiate the action and forward two original agreements/amendments to the appropriate EPA program office for signature. The agreements/amendments will then be forwarded to the appropriate EPA IA administration office for signature on behalf of the EPA. EPA will return one original copy after acceptance returned to the other agency after acceptance.

EPA IA Administration Office (for administrative assistance)

EPA Program Office (for technical assistance)

38. Organization/Address

U.S. Environmental Protection Agency
IASSC West
1200 Sixth Avenue, Suite 900, OMP-145
Seattle, WA 98101

39. Organization/Address

US Environmental Protection Agency
R5 - Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3507

Award Official on Behalf of the Environment Protection Agency

40. Digital signature applied by EPA Award Official | FOR Armina K. Nolan - Manager - Grants and Interagency Agreements Unit
Peter Murchie - AO delegate

Date

04/10/2012

Authorizing Official on Behalf of the Other Agency

41. Signature

Typed Name and Title

Charles Wooley, Deputy Regional Director

Date

04/11/2012

IA Terms and Conditions

1. Participation in Great Lakes Water Quality Agreement (GLWQA) and Great Lakes Restoration Initiative (GLRI) Programs and Processes

The U.S. Fish and Wildlife Service (USFWS) shall participate in the Great Lakes Restoration Initiative (GLRI) and the Great Lakes Water Quality Agreement (GLWQA) programs, processes and activities including the Lakewide Management Plans and Programs (LaMPs), activities relating to Areas of Concern (AOCs), State of the Lake Ecosystem Conference (SOLEC), Cooperative Science and Monitoring Initiative (CSMI), and the Binational Toxics Strategy (BTS), as requested. Such activities shall include, but not be limited to, meetings, conferences, and workshops directly tied to carrying out and implementing the GLRI and GLWQA.

2. Participation in Planning and Budgeting Activities

The USFWS will collaborate with EPA and other members of the Interagency Task Force regarding planning and budgeting activities for the Great Lakes Restoration Initiative including participation in Interagency Task Force meetings (as needed) and Regional Working Group meetings (weekly and as needed), assistance with budget development, development and updating of information for Congress and the public. This collaboration will include regular updates of an Interagency Funding Guide that will describe funding opportunities under the Initiative.

Information (including documents and conversations) regarding out-year budget development will be shared only among federal agency staff which must be involved in the out-year budget development process.

The USFWS will collaborate with EPA to comply with requirements, including provisions for science review or competition, for the Great Lakes Restoration Initiative as expressed in conference and/or committee reports, and as required by statute.

Within a reasonable time after appropriations are made and revisions to allocations, the USFWS shall update its template (identified on the attached Scope of Work) program descriptions for posting on the GLRI website.

3. Statutory Authority

The Statutory Authority of this IA is the Consolidated Appropriations Act 2012 P.L. 112-74 and Clean Water Act 104 (b)(2).

4. The Agency's Effort on Great Lakes Activities

EPA will work with USFWS to ensure that the funds transferred under this IA are not used to supplant the base programs' funding of USFWS. EPA recognizes its effort in this regard must be consistent with USFWS' statutory authorities.

5. Minimization of Indirect Costs

Conference Report language encourages EPA and its federal partners to limit overhead. Consequently, the USFWS will be required to minimize its indirect costs. In no event, shall indirect costs exceed 5% during the project period of this IA.

Indirect costs are intramural and extramural costs not directly attributable to the USFWS' effort. These costs may include management and administrative support costs, headquarters' allocation of facilities, personnel compensation support costs to regions and program offices, regional management and support costs and program office support costs.

6. Use of Contracts and Grants

A. The USFWS may use the funds transferred under this IA consistent with its grants, contracts and other programs in order to support the GLRI and the GLWQA.

To the extent that the USFWS uses funds transferred by EPA under authorities that have match requirements, the USFWS shall minimize the required match to the extent allowed under its authorities and regulations, unless the EPA Project Officer agrees otherwise.

The USFWS will use a competitive process to select awardees of grants and contracts consistent with its authorities and regulations. To the extent feasible, any Requests for Proposals (RFPs) for contract awards and grant awards, as well as invitation for bids, shall be shared with the EPA Project Officer and made available to other members of the Regional Working Group in a timely manner in advance of publication, allowing at least fifteen days for review and comment. The USFWS shall supply to the Project Officer, within 30 days of selection, a list of selected contractors and grantees. The USFWS will publish the name of those proposals which are selected and funded.

To the extent possible, contractors and awardees must commence work within 60 days of the effective date of an award.

B. The USFWS will use the following principles for project selection as set forth in the templates and as reflected in the solicitations for the USFWS' contracts and grants activities:

- Target projects to maximize environmental protection and restoration for the Great Lakes;
- Ability to advance implementation of GLRI Action Plan priorities;
- Ability to strategically-achieve measurable environmental outcomes linked to the highest priority issues;
- Ability to advance environmental priorities of existing Great Lakes strategic plans, especially the Lakewide Management Plans and Programs, Remedial Action Plans for Areas of Concern, the Great Lakes Regional Collaboration, the Binational Toxics Strategy and other relevant national and regional coordinated strategic planning efforts;
- Feasibility of prompt implementation, including a bias for action-ready projects and for those which demonstrate quick results;
- Observable local improvements, especially for projects at the field level;
- Bias for interagency/inter-organizational coordination and collaboration;
- Support for new work and for enhancements which do not replace existing Great Lakes base activities;
- Support by the Public and other Stakeholders;
- Ability to leverage non-federal resources;
- Promotion of long-term societal, economic, and environmental sustainability goals; and,
- Minimization of transaction costs.

C. Projects and activities must also meet standards for:

- Using best available science;
- Experience, ability, and authority of the funding recipient to properly perform the work;
- Reasonableness of project costs; and
- Measuring progress and success.

The USFWS shall offer USEPA and the other Agencies represented on the Regional Working Group a timely opportunity to review RFP submissions and serve on RFP review and selection panels consistent with existing authorities and USFWS' policies.

7. Expedite Required Permits

The USFWS shall obtain all required permits in a timely fashion for projects implemented under this IA. To the extent resources are required to expedite permit processing, EPA may authorize the use of IA resources for this purpose.

8. Fund Obligation/Utilization and De-obligation

All funding that USFWS utilizes pursuant to this Interagency Agreement shall be obligated by USFWS as expeditiously as possible for the foregoing programs, projects, and activities which support the Great Lakes Restoration Initiative and GLWQA. The USFWS shall use its best efforts to obligate the funds transferred by EPA before June 30, 2013 in order to minimize amounts that are returned to the EPA. Beginning in April 1, 2013 the USFWS shall report monthly to the Project Officer regarding its plans to use any funds which remain unobligated. Any funds which have not been obligated by June 30, 2013 shall be returned to EPA unless the EPA Project Officer has agreed in writing to (i) an extension or (ii) the funds' application to projects proposed by the USFWS for the subsequent year's allocation or (iii) another mutually agreed-upon use pursuant to the Initiative. Notwithstanding any efforts by USFWS to obligate such funds by June 30, 2013, funds which remain unobligated after (date) shall be de-obligated by EPA upon 10 days written notice to USFWS.

9. Healthy, Safety and Environmental Compliance

All health, lab and field activities conducted for this project must be in accordance and compliance with all applicable health, safety and environmental laws, regulations and guidelines.

10. Signage

The USFWS shall ensure that a visible project identification sign is erected as appropriate at each on-the-ground protection or restoration project. Each sign must give project information and credit the Great Lakes Restoration Initiative and appropriate federal agencies for funding. The USFWS will determine the design, placement, and materials for each sign.

11. Modification of Interagency Agreement and Written Approval for Transfers Among Templates

This Interagency Agreement can be amended or modified in writing upon consent of the Parties. The Scope of Work attached to this Interagency Agreement can be amended in writing upon consent of the Parties.

The USFWS must receive prior written approval by the EPA Project Officer for cumulative transfers among templates or projects which exceed or are expected to exceed the lesser of \$100,000 or ten percent of the Recipient's approved allocation.

12. Reporting

The Recipient agrees to comply with the provisions of the 2011 Great Lakes Grant Guidance.

The model for the Guidance is the Chesapeake Bay Guidance and its 11 attachments, which are available from: <http://www.epa.gov/region3/chesapeake/grants.htm#2009>.

Quarterly Financial Progress Reports: USFWS shall ensure that quarterly reporting is provided on funding utilized under GLRI and GLWQA activities. This reporting includes programs funded at or below \$500,000 that may not otherwise be identified in cross-cut budgets.

Semi-Annual Progress Reports: The USFWS shall submit progress reports, beginning with the date of IA execution, every six (6) months during the life of this agreement. Reports shall be submitted to the EPA Project Officer and may be provided electronically. The reports must contain information in order to ascertain that the Scope of Work (SOW) is being carried out as specified in the Interagency Agreement. The EPA Project Officer must be able to determine that all mission support products, services, information or data generation and use, including technology development and verification, is performed in accordance with EPA policies and the IA agreement. The USFWS and possibly its grantees and contractors, upon the direction of the

USFWS, may be able to input information directly into the system using specified formats and timeframes. The USFWS shall ensure that by April 15 and October 15 of each year, information is reported in an accountability system, to be determined, pertaining to its contributions (including those from contracts and grants) to Goals, Objectives, and Measures under the GLRI Action Plan.

Annual Report: Beginning in FY 2011, EPA will work with its Interagency Task Force partners to prepare and submit an Annual Report to the President on progress in achieving the Initiative's goals, outcomes, and targets. To that end, the Recipient shall include in an annual report to EPA, information on its Great Lakes activities, including those funded pursuant to the Great Lakes Restoration Initiative and those funded by its base programs. The report shall include funding beginning in FY 2011 and each fiscal year thereafter, detail yearly program accomplishments, and compare specific funding levels allocated for participating Federal agencies from fiscal year to fiscal year. Reporting shall include programs funded at or below \$500,000 that may not otherwise be identified in cross-cut budgets.

Final Progress Report: The USFWS shall submit a final report to the EPA Project Officer upon expiration of this IA. This report shall incorporate project outputs and summarize the nature and extent of the project, methodologies employed, significant events and experiences, and a compilation of the data collected. The final report shall also include analysis of the data as well as conclusions, and recommendations. The final report shall incorporate photo documentation of funded projects and environmental progress under the projects at appropriate phases, and appropriate illustrations, diagrams, charts, graphs, and maps to express the data and findings. The draft Final Report will be submitted electronically to the USEPA Project Officer no later than 45 after the end of the project period for review and comment. Electronic and paper versions of the Final Report shall be submitted no later than 90 days after the end of the project period.

13. Accountability/Performance System

The USFWS and other Great Lakes partners will input all required accountability and performance report information into the Great Lakes Accountability System (GLAS). Information will describe GLRI activities and demonstrate how results are being achieved pursuant to the Action Plan. Recipients and sub-recipients shall be responsible for inputting their accounting/performance data into the GLRI database. The website for the database will be accessible through the GLNPO website at <https://restore.glnpo.net/glas/login.htm>.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2005-0001. This information collection is scheduled to expire on July 31, 2013.

14. Quality Assurance

The recipient must have a Quality Assurance (QA) and Quality Control (QC) System in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. This System must be in place before any data collection takes place. Since most of the GLRI decisions will rest on environmental data, a management system is needed that provides for:

1. Identification of environmental programs for which QA and QC activities are needed;
2. Specification of the quality of the data required from environmental programs; and,
3. Provision of sufficient resources to assure that an adequate level of QA and QC activities are performed.

This IA will provide mission support products, services, information or data generation including technology development and verification. Any of these activities will be performed in accordance with approved Quality Assurance procedures or standards with adequate documentation for transparency purposes, including review and approval by recipients QA manager. Because of the nature of the action, data may be collected without EPA review and approval of a project-specific Quality Assurance documents. The EPA Quality Assurance Officer must be notified when

procedures are developed and the quality assurance procedures should be documented. Quality Assurance documentation should be maintained by the IA recipient, but must be provided for review by the EPA Quality Assurance Office on an as needed basis. This documentation should include, but is not limited to, (1) quality assurance procedures, including the rationale for decisions concerning sampling and analysis; (2) decisions on usability of data; and (3) information on quality-control methods and measurements, e.g., performance evaluation samples, field duplicates, field blanks, laboratory blanks, laboratory duplicates, laboratory surrogate and matrix spikes, laboratory control samples, and calibration. EPA Guidance for Quality 4-24 Assurance Project Plans (QA/G-5) (EPA2002) can be found at: <http://www.epa.gov/quality/qmps.html>

15. Climate Change Emissions Minimization/Reductions

The USFWS shall encourage (i) minimization and reduction, where possible, of greenhouse gas emissions resulting from activities carried out pursuant to this agreement and (ii) the tracking of the reduction of greenhouse gas emissions through these activities.

16. Contract Termination, Disputes and Protests

If a contract or order awarded pursuant to this IA is terminated or cancelled or a dispute or protest arises from specifications, solicitation, award, performance or termination of a contract, USFWS will take appropriate action in accordance with the terms of the contract and applicable laws and regulations. The EPA shall be responsible for all costs associated with termination, disputes, and protests, including settlement costs, except that the EPA shall not be responsible to the USFWS for costs associated with actions that stem from errors in performing the responsibilities assigned to the USFWS. The USFWS shall consult with the EPA before agreeing to a settlement or payments to ensure that the USFWS has adequate time in which to raise or address any fiscal or budgetary concerns arising from the proposed payment or settlement.

17. Termination

This IA may be terminated upon thirty (30) calendar days written notice by either party. If this agreement is cancelled, any implementing contract/order may also be cancelled. If the IA is terminated, the agencies shall specify the terms of the termination, including costs attributable to each party and the disposition of awarded and pending actions.

18. Interpretation of IA

If the USFWS and EPA are unable to agree on the interpretation of a material aspect of this IA, the parties agree to engage in an effort to reach mutual agreement regarding the proper interpretation of this IA, including amendment of this IA, as necessary, by escalating the dispute within their respective organizations.

If a dispute related to funding remains unresolved for more than sixty (60) calendar days after the parties have engaged in an escalation of the dispute, the parties agree to refer the matter to their respective USFWS Chief Financial Officers with a recommendation that the parties submit the dispute to the CFO Council Intragovernmental Dispute Resolution Committee for review in accordance with Section VII of Attachment 1 to the Treasury Financial Manual, Volume 1, Bulletin No. 2007-03, Intragovernmental Transactions, Subject: Intragovernmental Business Rules, or subsequent guidance.

19. Indirect Costs

The USFWS certifies that (1) any indirect costs incurred by USFWS included in billings to EPA represent, in accordance with generally accepted accounting principles, indirect costs that would not have been otherwise incurred by the performing agency, or (2) statutory authority exists for charging other than the incremental costs of performance. If an audit determines that any direct or indirect costs charged to EPA are unallowable, EPA will be notified immediately following the resolution of the audit and EPA will be credited those amounts.

20. Billing Payments

When submitting invoices to the Office of the Chief Financial Officer/Cincinnati Finance Center

(OCFO/CFC) requesting payment, a breakdown of the costs associated with the invoice must be provided to the EPA Project Officer (EPA PO). This information allows the EPA PO to determine that costs billed to EPA are necessary and reasonable. If this information is not provided, the EPA PO will notify the OCFO/CFC to suspend or charge back the payment.

21. Payment. Not more than 30 days before incurring reasonable and necessary costs described in the scope of work, the USFWS may, pursuant to this Agreement, submit an estimated payment request via the IPAC system for the electronic transfer of funds to pay such costs. When an IPAC charge is reflected against the CFC's Agency Location Code (ALC) 68-01-0727, the Treasury Department will automatically transfer funds to the requesting Agencies ALC. The USFWS will use its best efforts to obligate/expend any funds it receives within 30 days of receipt. On a monthly basis, a breakdown of the costs associated with payments must be provided to the EPA Project Officer (EPA PO). This information allows the EPA PO to determine that costs billed to EPA are necessary and reasonable. If this information is not provided, the EPA PO will notify the OCFO/CFC to suspend or charge back the payment. For further information, please contact:

U.S. EPA CFC

Attn: Jeff Marsala

26 W. ML King Dr.

Cincinnati, OH 45268-7002

E-mail: Marsala.Jeffrey@epa.gov

22. IAs with Contracts or Procurement

In accordance with Public Law (P.L.) 102-389, EPA's policy requires, to the fullest extent possible, that at least 8% of its overall Federal funding for prime and subcontractors awarded in support of authorized programs be awarded to business concerns or other organizations owned or controlled by socially and economically disadvantaged individuals, including historically black colleges and universities and women.

The IA recipient agrees, in awarding contracts under this IA, to comply with EPA's aforementioned utilization policy for Minority Business Enterprises (MBEs) and

Women's Business Enterprises (WBEs), which is codified at 40 C.F.R. Part 33. Where the subject IA is for the benefit of Native Americans, the IA recipient agrees to

comply with the provisions found at 40 C.F.R. Section 33.304(c), which provides for the preference for Indian-owned economic enterprises and Indian organizations in

contracting. The IA recipient will also strive to meet EPA's SBA negotiated goals for awarding contracts to small and disadvantaged businesses. The IA recipient will

accomplish these objectives through adherence to the small and minority-owned business requirements set forth in the Small Business Act, 15 U.S.C. §§ 631 et seq., and

the annual Small Business goals negotiated with the IA recipient and Small Business Administration. All reporting on MBE/WBE and small business accomplishments will

be accomplished through the existing federal contracting reporting mechanism, currently the Federal Procurement Data System, Next Generation.

The report should be submitted to:

Office of Small Business Programs

U.S. Environmental Protection Agency

1200 Pennsylvania Ave., NW (Mail code: 1230T)

Washington, D.C. 20460

A copy should be sent to:

Greg Luchey, DBE Coordinator

U.S. EPA Region 10

1200 Sixth Avenue, Suite 900

Mail Stop: OMP-145
Seattle, WA 98101

23. Equipment Disposition: Title to Other Agency

The USFW shall supply to the Project Officer, within 30 days of selection, a list of equipment costing more than \$1,000. Property/equipment authorized under this IA will be titled with the USFWS and subject to that USFWS' property management procedures with no further accountability to EPA.

24. Sufficient Progress

EPA expressly reserves the right to terminate this IA for failure to make sufficient progress so as to reasonably ensure completion of the project within the project period, including any extensions. EPA will measure sufficient progress by examining the performance required under the Statement of Work, the time remaining for performance, and/or the availability of funds necessary to complete performance. In exercising the right to terminate, EPA will follow the procedures for terminating the IA in the Terms and Conditions.

25. Restrictions on FY12 Funding for Corporations with Unpaid Federal Tax Liabilities and Felony Convictions

This IA obligates and transfers or advances EPA funds appropriated under the Department of Interior, Environment, and Related Agencies Appropriations Act, (FY12 Appropriations Act). As a result, this interagency agreement (IA) is subject to the provisions of Division E, Sections 433 and 434 of the Appropriations Act, regarding federal felony convictions and unpaid federal tax liabilities. Specifically,

Section 433 provides:

None of the funds made available by this Act [FY12 Appropriations Act] may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation, or such officer or agent, and made a determination that this further action is not necessary to protect the interests of the Government.

Section 434 of Division E of the Appropriations Act further provides:

None of the funds made available by this Act [FY12 Appropriations Act] may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation with respect to which any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government.

Accordingly, by accepting the award of this IA, the Fish and Wildlife Service agrees that it will comply with and implement the prohibitions of Sections 433 and 434 for any contract, assistance agreement, loan, loan guarantee or other instrument with any corporation that will be funded with funds provided under this IA. Non-compliance with the provisions of Sections 433 and 434 may implicate the Antideficiency Act. Fish and Wildlife Service will forward to the EPA Award Official, within 45 days, any determination and documentation supporting an award where suspension and debarment are considered by the awarding agency.

26. Expiration of Funds under Non-Economy Act

For IAs with fixed year funding and executed under any authority other than the Economy Act, if funds are properly obligated on an IA, a performing agency may in turn obligate/ expend these funds until the IA ends or the work is complete, whichever is first.

END OF INTERAGENCY AGREEMENT #DW-14-95820201-0

Great Lakes Restoration Initiative

Interagency Agreement

Scope of Work

AGENCY NAME: U.S. Fish and Wildlife Service

CONTACT INFORMATION: Amy McGovern (312-886-1474); Bob Krska (612-713-5103)

1. INTRODUCTION

Consistent with the mission of the U.S. Fish and Wildlife Service (Service) and related statutes, authorities, policies, programs, priorities, activities, and unique expertise, the Service has been a proactive participant working in close partnership with stakeholders in long-standing efforts to conserve fish, wildlife, and plants and their habitats throughout the Great Lakes Basin. The Service was an active participant in development and implementation of the Great Lakes Collaboration and continues with the Great Lakes Restoration Initiative (GLRI). As described in this Interagency Agreement, the Service is focusing on high priority activities to protect, maintain, restore, and enhance the Great Lakes ecosystem that will contribute to achievement of measurable results identified in the GLRI Action Plan.

The purpose of this Interagency Agreement is to provide funding to the Service to supplement Service activities to address priorities of the GLRI. In short, each of the Service's projects described in this Interagency Agreement will address measures described for each template (project). In addition to making progress on GLRI Action Plan outcomes, the Service's efforts made possible through this agreement will also support priorities, programs, and projects related to the Great Lakes Water Quality Agreement and associated efforts, including Lakewide Management Plans, Remedial Action Plans for Areas of Concern (AOCs), Binational Toxics Strategy, Cooperative Science and Monitoring Initiatives, and Fishery Management Plans, among others.

Of the five Focus Areas identified as priority areas in the GLRI Action Plan, the Service's activities funded through GLRI will directly support goals and objectives within four Focus Areas: Toxic Substances and Areas of Concern; Invasive Species; Habitat and Wildlife Protection and Restoration; and, Accountability, Education, Monitoring, Evaluation, Communication and Partnerships. However, as is true with the interconnectedness of components of the Great Lakes ecosystem, Service activities and achievements in each of these Focus Areas support goals identified throughout the five Focus Areas.

The Service has contributed substantively to progress Federal agencies are making in achieving GLRI Action Plan Measures of Progress. Among the notable accomplishments include the following:

- Planning for and implementing habitat restorations associated with several AOCs, including Black River, Grand Calumet River, Ottawa River, St. Louis River
- Information contributing to assessing progress in delisting Beneficial Use Impairments, including a preliminary assessment of incidence rates of fish tumors and deformities for the St. Louis River AOC; assessment of population, reproductive, and health Impairments in colonial water birds breeding in Michigan's AOCs; updating the Conservation and Recreation Lands (CARL) Database and Assess Indicator Species in the Saginaw River/Bay

AOC; assessing avian reproductive impairment and degradation of benthos in the Grand Calumet AOC; assessing fish tumors and deformities, sediment remediation, and habitat restoration in the Buffalo River, Eighteenmile Creek, Rochester Embayment, and Niagara River AOCs; and, evaluating fish as vectors of contaminants for restoring river connectivity in the Saginaw River/Bay AOC

- Assigned 1,400 species (400 in FY2010 and 1,000 in FY2011) for invasive species risk assessment; completed about 600 draft species risk assessment reports; risk assessments for the remaining species are being conducted
- All eight Great Lakes states are implementing their Aquatic Nuisance Species Management Plan to protect the Great Lakes. Some tribes began receiving GLRI funding in FY2011 to develop and implement aquatic invasive species management plans. Actions taken by all entities include invasive species monitoring, rapid response, outreach, and control. The State of Illinois has been a leader in efforts to protect the Great Lakes from invasion of Asian carps via the Chicago Area Waterways System.
- In FY2010 and FY2011, lake trout restoration accomplishments included enhanced population assessment and modeling throughout the basin, genetics work, radio tracking, coded wire tagging, increased fish production, emerging fish disease evaluations and diagnostic work, and improvements to the infrastructure at multiple National Fish Hatcheries.
- Lake sturgeon restoration accomplishments included enhanced population assessment and modeling throughout the basin, larval fish evaluations, habitat evaluations, radio tracking, rearing, stocking, and assessment of stream-side propagation techniques. Funding has also supported pursuit of criminal investigations focused on illegal take of Great Lakes lake trout and lake sturgeon populations.
- The Service announced the delisting of the Lake Erie Watersnake in 2011; as a result of GLRI support, requisite post-delisting activities were assured, thereby achieving final delisting of that species.
- GLRI funding received in FYs 2010 and 2011 has significantly contributed to the goal of delisting 2 species by 2014 and has contributed to the long-term protection goals for imperiled fish and wildlife populations in the basin.
- The Service's watershed habitat and species restoration initiative has protected 870 acres of uplands and wetlands, restored or enhanced 750 acres of wetlands, restored or enhanced 820 acres of uplands, removed 16 fish passage barriers, reopened 138 stream miles to fish movement, stabilized 1 mile of stream banks, and improved in-stream habitat throughout the Basin.
- The Service, applying its land acquisition authorities, has acquired the following parcels/acreages being managed for fish and wildlife resources: Sugar Island - 144 acres and 29 acres; Walker tract - 180 acres). In addition, we have monitored colonial water bird resources on Hat, Jack, Cat, Gull, and Poverty Islands and monitored vegetation on Jack, Hat, Cat, and Birds Tree Islands.
- The Upper Midwest-Great Lakes Landscape Conservation Cooperative has provided GLRI funding through grants based on Requests for Proposals in both FY2010 and 2011. Some of these projects, which address such things as climate change (species vulnerability, adaptation strategies, and related), map to several Measures of Progress and support many GLRI-funded projects.
- The Service purchased in FY 2011 with GLRI funds two avian radar systems. We deployed the units during spring and fall migration seasons on Lakes Michigan and Huron in conjunction with 24 acoustic/ultrasonic monitors distributed along Great Lakes shorelines. Data collected from these two seasons are being analyzed. In addition, the Service issued

five grants for a total of \$148,000 to digitize decades of bird observations from Great Lakes shorelines and to monitor bird use on various Great Lakes islands.

The Service's long-term goals, consistent with our mission, are to conserve, protect, and enhance sustainable fish and wildlife and plants and their habitats throughout the Great Lakes Basin. We pursue these goals with base, project-specific, and other related funding sources. The Service's short-term goals, as they relate to this Interagency Agreement, are to supplement the Service's high priority conservation, protection, and enhancement activities in pursuit of the GLRI's Action Plan goals. GLRI goals and associated objectives, identified in the GLRI Action Plan and extending through FY2014, are achieved by agency contributions of measureable outputs (Measures of Progress) to achieving each measure's targets. As described in our templates, the Service will contribute measureable outputs that will contribute substantially to achievement of targets and, ultimately, Action Plan goals and objectives.

In December 2011 the U.S. Fish and Wildlife Service went 'live' with a new accounting system, FBMS, that is intended to bring fundamental and constructive change to all business processes throughout the Department of the Interior. Efforts to streamline GLRI business processes are being implemented, however, the Service may experience transitional delays meeting obligation and expenditure requirements for the FY2012 agreement. As such, the Service is requesting an obligation extension of FY2012 funds to June 30, 2013. Per the terms and conditions of this agreement, monthly reporting of obligations will begin one year from approval.

The Service requests that the budget period for the FY2012 agreement be set to extend into FY2016. A similar extension, which was approved in the Service's FY2010 and FY2011 interagency agreements, allows for the completion of and expenditures on non-severable projects in the agreement, e.g., multi-year habitat restoration projects.

2. BUDGET & PROJECT DETAIL

Focus Area	Project Title (template no.)	Draft Allocation
TX	Accelerating Remediation and Restoration Contaminated Sediment (020)	\$1,540,000
TX	Early Warning to Identify Effects of New Contaminants (021)	\$1,600,000
IS	Aquatic Invasive Species Prevention Program (024)	\$200,000
IS	Integrated Pest Management for Priority Species (026)	\$1,000,000
H	Implementing the Great Lakes Fish & Wildlife Restoration Act (027)	\$1,500,000
H	Restoration of Lake Trout & Lake Sturgeon in the Great Lakes (028)	\$6,619,000
H	Great Lakes Basin Endangered Species Recovery Initiative (030)	\$600,000
H	Great lakes Watershed Habitat & Species Restoration Initiative (031)	\$3,596,857
H	Conservation of Great Lakes Islands and Coasts (032)	\$400,000

H	Great Lakes Landscape Conservation Cooperative (034)	\$500,000
H	Great Lakes Wind Power: Making it Wildlife Friendly (036)	\$500,000
H	Great Lakes Basin Fish Habitat Partnership (037)	\$400,000
H	Sustain Our Great Lakes – Habitat (155)	\$2,647,744
H	Sustain Our Great Lakes – Areas of Concern (157)	\$4,417,969
IS	State & Tribal Aquatic Nuisance Species Management (189)	\$7,500,000 (after transfer of \$500,000 of FWS's \$8M allocation to BIA)
H	Mass Marking of Great Lakes Trout and Salmon (305)	\$1,500,000
AEMECP	FWS LaMP Coordination and Implementation (331)	\$150,000
IS	Asian Carp Framework Projects - USFWS (671)	\$3,122,322
IS	Asian Carp Framework Projects – IL DNR (672)	\$5,787,417
	Total	\$43,581,309

3. NARRATIVE SCOPES OF WORK:

Title: Accelerating Remediation and Restoration of Contaminated Sediment at AOCs (Template No. 020)

Funding: \$1,540,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006, Clean Water Act

Work: The Service's environmental contaminant specialists in Great Lakes Ecological Services field offices will continue to work with Federal, State, and local partners to eliminate the effects of contaminants in Areas of Concern (AOC). Service contaminants specialists will work with partners to guide remediation of contaminants to remove pathways and mechanisms by which contaminants impair beneficial uses, design sediment removal projects to achieve the best, most efficient cleanups while preserving and restoring high quality habitat in Great Lakes AOCs. Selected remediation and restoration projects will contribute to elimination of Beneficial Use Impairments (BUI) to return AOC aquatic ecosystems to full function.

Specifically, the Service will continue to provide technical assistance to the Great Lakes National Program Office (GLNPO) Sediment Team on Great Lakes Legacy Act funded projects and look for opportunities to use previous Natural Resource Damage Assessment settlement funds to collaborate with partners on restoration projects. The Service will continue to evaluate habitat restoration and landscape management plans available for AOCs to determine which AOCs present the best opportunities to help meet delisting targets for BUIs in areas currently impacted by contaminated sediment. Using principles of ecological restoration and ecotoxicology, Service biologists will continue to work with Federal, State, and local conservation partners to identify site specific (e.g., "hotspots") habitat and species conservation goals, evaluate contaminants causing impairments, and perform scientific analyses to identify actions needed to eliminate the contaminants.

Milestones:

March 30, 2012	Select specific projects for funding by
May 30, 2012	Complete necessary agreements/contracts
May 2012 – October 2012	Conduct any necessary field work
Ongoing through 2012	Evaluate data/information
Annually	Reports

Great Lakes Action Plan Measure of Progress: This project contributes directly to the following GLRI Action Plan Toxic Substances and Areas of Concern Focus Area measures:

- Number of Areas of Concern in the Great Lakes where all management actions necessary for delisting have been implemented (Measure No. 1)
- AOC BUIs removed (Measure No. 2)
- BUI removal project starts at AOCs (Measure No. 3)
- Cubic yards of contaminated sediment remediated in the Great Lakes (Measure No. 4)

This project will address several specific BUIs, including fish consumption advisories, degradation of fish and wildlife populations, fish tumors and deformities, degradation of benthos, and loss of fish and wildlife habitat. 8-10 BUI removal project starts are estimated for FY2012.

Contact: Annette Trowbridge, annette_trowbridge@fws.gov, (612) 713- 5104

Title: Early Warning to Identify Effects of New Contaminants (Contaminants of Emerging Concern) (Template No. 2012-021)

Funding: \$1,600,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006, Clean Water Act

Work: As recognized in the Great Lakes Restoration Initiative Action Plan, one of the serious challenges the Great Lakes face is the presence of toxic substances including newly recognized chemicals of concern (CEC) that are potential threats to the chemical integrity of the Great Lakes. Currently, there are few data available regarding effects of CECs on fish and wildlife. The need for additional information on CECs to make well-informed and science based resource management decisions cannot be overstated. It is important to not only understand these compounds with respect to their concentrations in the environment but to also understand their toxicity and routes of exposure and relate this information to lethal and sub-lethal impacts. This information is needed to make science-based resource management decisions and recommendations for effective control strategies to minimize adverse consequences. Failure to identify these contaminants of emerging concern may result in deleterious impacts to Great Lakes resources with associated adverse economic and recreational consequences.

In addition to addressing CECs across the Great Lakes Basin, this project directly supports Remedial Action Plans for AOC, development and refinement of BUI delisting criteria, and associated habitat restoration plans. In addition, this project directly supports the goals and objectives of the Great Lakes Water Quality Agreement and the Great Lakes Bi-National Toxics Strategy.

The following goals and objectives for this project, which will be implemented by Service Environmental Contaminants Specialists located in our field offices in collaboration with project partners, will guide project implementation:

- Determine the extent to which CECs may be presenting a risk to fish and wildlife resources, which will include the following objectives: measuring concentrations of select CECs across time in water, sediment, and fish at locations in the Great Lakes that have been characterized at AOCs and at reference locations; comparing concentrations of CECs among AOC locations to determine areas that have increased concentrations of CECs; compare concentrations of CECs among sites at each location to determine possible sources for CEC introduction; determine if analyzed CECs are associated with observed exposure effects in fish samples; and, determine if select CECs are of greater concern than others.
- Recommend controls/regulations or resource management actions to prevent or reduce adverse impacts to fish and wildlife resources in the future. Components of this goal include the following objectives: conduct a literature search to create a bibliographic database; compare concentrations of select CECs at AOC locations to known effect concentrations to determine areas most at risk to cause effects in fish and wildlife; analyze select response endpoints in fish to determine possible CEC exposure; and, compare fish responses among locations to determine areas of increased exposure effects.
- Coordinate and collaborate with other Federal agency stakeholders (U.S. EPA, NOAA, USGS, others) to ensure efficient and effective research, including the following objectives: establish a spatially-explicit relational database for collecting project study information and related literature; and, explore recommendations from other Federal agencies to ensure research is contributing to the protection of the Service's trust resources.

Milestones:

April 2012 – June 2012 Sample collection conducted
May 2012 – September 2012 Sample analysis for select analytes

Ongoing through 2012	Data analysis
Ongoing through 2012	Refinement and population of database
Annual	Reporting

Great Lakes Action Plan Measure of Progress: This project contributes directly to the following GLRI Action Plan Toxic Substances and Areas of Concern Focus Area measures:

- Number of Areas of Concern in the Great Lakes where all management actions necessary for delisting have been implemented (Measure No. 1)
- AOC BUIs removed (Measure No. 2)
- BUI removal project starts at AOCs (Measure No. 3)

This project will address several specific BUIs, including fish consumption advisories, degradation of fish and wildlife populations, fish tumors and deformities, degradation of benthos, and loss of fish and wildlife habitat. 7 BUI removal project starts are estimated for FY2012.

Work will be conducted in the following locations:

St. Louis River AOC, Minnesota
Green Bay AOC, Wisconsin
Milwaukee R. AOC, Wisconsin
Detroit R. AOC, Michigan
Ashtabula R. AOC, Ohio
Maumee R. AOC, Ohio
Rochester Bay AOC, New York

Contact: Annette Trowbridge, annette_trowbridge@fws.gov, (612) 713- 5104

Title: Aquatic Invasive Species prevention program (Template No. 2012-024)

Funding: \$200,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The Service will establish and implement an aquatic invasive species risk assessment program that supports decisions for Federal and State regulation, industry self-regulation, and habitat restoration programs and projects. That program will implement, when needed and requested, a rapid screening process to assess risk of establishment and significant, negative impacts of species that:

- are imported and traded (including and especially pet and aquaculture trades), with a focus on invasion risk to the Great Lakes Basin
- may expand abundance and/or distribution as the projected result from habitat restoration and enhancement under the Great Lakes Restoration Initiative, as requested by other Federal, and Regional, e.g., Great Lakes Fishery Commission, State, Tribal, and local governments, industries, and nongovernmental organizations

The rapid screening process consists of the following two foundational elements:

- Climate match of a nonnative species' range elsewhere in the world with climate in the Great Lakes (and other portions of the continental U.S.)
- Documenting the history of the subject species' invasiveness in the world via information and data acquired, analyzed, and synthesized from databases and peer-reviewed literature; based on those foundational elements, projections of impacts to the U.S. will be synthesized and summarized by trained risk assessors

This project is complementary to other invasive species efforts in the basin, including the Great Lakes Mississippi River Interbasin Study (GLMRIS) coordinated through the Army Corps of Engineers, and the Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) administered by the National Oceanic and Atmospheric Administration. Unlike the FWS prevention program which is conducting risk assessments for nonnative species *not* known to be established in the U.S., the GLMRIS program is focused on species already established in either the Mississippi Basin or the Great Lakes Basin. The program complements the information available in GLANSIS, as well, which is focused on ballast mediated species in the Great Lakes. These information resources, in combination with other state and federal efforts, constitute our most comprehensive prevention effort on the invasive species risk assessment front.

An example risk assessment report (aka Ecological Risk Screening Report) is included as an attachment to this interagency agreement.

Milestones: Risk assessments will begin within 30 days after receiving GLRI funds for this project; all assessments will be completed within one year.

Great Lakes Action Plan Measure of Progress: The Service will conduct risk assessments for up to 200 nonnative species not established but that are either traded or could be traded within the Great Lakes Basin. Assessments results can be used for regulatory (Federal and State, provincial) and nonregulatory activities. Risk assessment information will facilitate achievement of targets established in the GLRI Action Plan Invasive Species Focus Area for rate of nonnative species newly detected in the Great Lakes ecosystem (Measure No. 1):

- This project is intended to reduce the risk of nonnative species, which may become invasive, and of their establishment and impacts in the Great Lakes.

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edited 3/13/12 (IL DNR carp)

- States, the Service, cities, and other regulatory authorities can use risk assessment reports to support regulatory actions.
- Industries can use risk assessment reports to support voluntary risk reduction activities including no import of species at risk to become invasive in the Great Lakes.

Contact: Mike Hoff, michael_hoff@fws.gov, (612) 713-5114

Title: Integrated Pest Management for Priority Species (Template No. 2012-026)

Funding: \$1,000,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: This project will continue to develop and implement a Great Lakes Aquatic Invasive Species Integrated Management Program (Program) to implement rapid response, control, and management activities and programs, assess effectiveness of those programs, and adapt them as needed. Specifically, this Program will continue to: 1) develop, test, and implement a biologically and statistically tenable early detection program for newly introduced invasive species into the Great Lakes and adapt methods to detect newly introduced invasive species, and 2) participate in rapid response actions, if needed. It will enhance early detection monitoring for Aquatic Invasive Species and support participation in rapid response actions.

Milestones:

Ongoing through September 2012 Project implementation

Great Lakes Action Plan Measure of Progress: This project directly supports Invasive Species Focus Area Goals 4 (A comprehensive program for detection and tracking newly identified invasive species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions) and 5 (An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation).

The Service and partners will implement 75 early detection surveys in the field. Enhanced monitoring developed and implemented through this template will continue to contribute information to document assess the metric: rate of nonnative species newly detected in the Great Lakes ecosystem. In addition, the program addresses one of nine priorities of the Council of Great Lakes Governors and supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

Contact: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110

Title: Implementing the Great Lakes Fish and Wildlife Restoration Act (Template No. 2012-027)

Funding: \$1,500,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006

Work: Implementation of the Act directly supports long-term habitat goals identified in the GLRI Action Plan for protecting and conserving Great Lakes fish and wildlife populations, as well as important fish and wildlife habitats. The Great Lakes Fish and Wildlife Restoration Act (Act) is the primary federal program dedicated to restoring important fish and wildlife and the habitat they depend on in the Great Lakes. The Act enables the eight Great Lakes States, Native American Tribes, and private interests to collaborate in implementing practical solutions to restore and conserve the region's fish and wildlife resources. The purposes of the Great Lakes Fish and Wildlife Restoration Act of 2006 are to develop and implement proposals for the restoration of fish and wildlife resources and their habitats in the Great Lakes Basin and to provide assistance to the Great Lakes Fisheries Commission, States, Indian Tribes, and other interested entities to encourage cooperative conservation, restoration and management of the fish and wildlife resources and their habitat in the Great Lakes Basin.

Project implementation, through on-the-ground-habitat and research efforts to answer important conservation questions, will enhance populations of lake sturgeon, brook trout, migratory birds, threatened and endangered species, and other native aquatic and terrestrial species of fish and wildlife within the Great Lakes Basin. These efforts will help achieve self-sustaining aquatic populations and contribute to acres and miles of habitat protected, restored, or enhanced. In administering this program in relation to the Great Lakes Basin, the Director shall seek to achieve the following goals:

- Restore and maintain self-sustaining fish and wildlife resources
- Minimize the impacts of contaminants on fishery and wildlife resources
- Protect, maintain, and, where degraded and destroyed, restore fish and wildlife habitat, including enhancement and creation of wetlands that result in a net gain in the amount of those habitats
- Stop illegal activities adversely impacting fishery and wildlife resources
- Restore threatened and endangered species to viable, self-sustaining levels
- Protect, manage, and conserve migratory birds

Milestones:

December 2011	Pre-proposals due
March 2012	Full proposals due
March-May 2012	Project review and selection
June 2012	Grant contracts offered to successful projects
July-October 2012	Project implementation

Great Lakes Action Plan Measure of Progress:

This project will contribute to achievement of GLRI Action Plan Habitat and Wildlife Protection and Restoration Focus Area measures, including restoration of 700 acres of wetlands (Measure No. 6); restoration of 50 upland acres (Measure No. 7); improvement of water quality; and development of 12 cooperative and grant agreements with partners to achieve the fish and wildlife management goals of the Great Lakes States and Tribes for fish and wildlife and their habitats.

Contact: Mark Holey, (920) 866-1711, mark_holey@fws.gov; Brian Elkington, (612) 713-5168, brian_elkington@fws.gov

Title: Restoration of Lake Trout and Lake Sturgeon in the Great Lakes (Template No. 028)

Funding: \$6,619,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Partners for Fish and Wildlife Act

Work: The Service will undertake several lake trout restoration activities, including enhanced population assessment and modeling, to aid Service offices in determining appropriate strains and stocking levels to achieve restoration of native lake trout in all five of the Great Lakes. This will include improving and upgrading Service National Fish Hatcheries to produce additional lake trout needed to fully meet the agency's goals as established by lake trout rehabilitation plans and the U.S. v. Michigan Consent Decree, and complementing efforts of the Great Lakes Fisheries Commission's Sea Lamprey Control Program. This project will also support rearing, stocking, and assessing native lake sturgeon in priority Great Lakes tributaries throughout the basin, including assessing efficacy of stream-side propagation and stocking techniques as a means of re-establish populations of lake sturgeon in their historic tributaries. Finally, this project will support law enforcement pursuit of criminal investigations focused on illegal take of Great Lakes lake trout and lake sturgeon.

Milestone:

April 2012 - October 2012	Conduct population and habitat assessments
Ongoing (field season)	Enhance stocking efforts
Ongoing, beginning March 2012	Modeling, propagation, stocking evaluations
Ongoing, beginning March 2012	Infrastructure improvement work
Ongoing, beginning March 2012	Service Law Enforcement investigations

Great Lakes Action Plan Measure of Progress: This project contributes directly to several measures within Focus Area 4, Habitat and Wildlife Protection and Restoration, including % of populations of native aquatic non-threatened and endangered species self-sustaining in the wild (Measure No. 5). This project will support restoration of lake trout and lake sturgeon populations to self-sustaining levels in the wild and preclude the need for listing under the Endangered Species Act. Funding will result in the following quantifiable measures:

- Propagate 600,000 fall fingerlings and 400,000 yearling lake trout
- Stocking of up to 4,000 lake sturgeon fingerlings to assist natural reproduction (Lake Sturgeon Streamside Rearing Program)
- Completion of 15 tribal consultations
- Completion of 15 population assessments
- Completion of 12 lake sturgeon assessments (population and habitat)
- Completion of infrastructure improvements needed for additional lake trout yearling production

Contacts: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110; Kurt Schilling, kurt_schilling@fws.gov, (612) 713-5139

Title: Great Lakes Basin Endangered Species Recovery Initiative (Template No. 2012-030)

Funding: \$600,000

Authority: Endangered Species Act of 1973, as amended

Work: Endangered species serve as a barometer to the health of the Great Lakes Ecosystem and the Service expects to provide \$600,000 through competitive grants or cooperative agreements to promote and enhance recovery of Endangered and Threatened species that occur in the Ecosystem. The Service will make funds available for projects through both a public request for proposals and existing Service cooperative agreements. We anticipate funding projects that entail direct species management, habitat management such as wetland restoration, improving hydrology of Great Lakes tributaries, reforesting habitats, reducing impacts of invasive species, and creating and/or improving corridors between habitats. These projects will be accomplished by connecting and leveraging input from current Federal and State programs, grassroots organizations, and local people. The Initiative will benefit priority listed species in the watershed, particularly the federally protected **piping plover**, a GLRI focal species identified in the GLRI Action Plan.

Milestones:

January 2012	RFP out to Service field offices to be followed by posting to Grants.gov for receipt of applications
March 2012	RFP closes
April 2012	Ranking and selection of projects
May 2012	Announcement of awards; initiation of field season-dependent actions thereafter

Great Lakes Action Plan Measures of Progress: Project implementation will advance Focus Area 4 - Habitat and Wildlife Protection and Restoration recovery goals for listed populations within the Great Lakes Basin. Specifically, FY 2012 GLRI funds for this project will target delisting the Pitcher's Thistle and other imperiled Great Lakes species. Habitat protection, restoration, and enhancement goals will contribute to species recovery and will support the performance metric identified in the Action Plan: "Number of species delisted due to recovery".

Point of Contact: Lisa Mandell, lisa_mandell@fws.gov, (612) 713-5343

Title: Great Lakes Watershed Habitat and Species Restoration Initiative (Template No. 2012-031)

Funding: \$3,596,857

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Partners for Fish and Wildlife Act; Endangered Species Act of 1973, as amended

Work: This project is a collaborative effort among the Service's National Fish Passage Program (FPP), Partners for Fish and Wildlife Program (PFW), Migratory Bird Joint Ventures in the Great Lakes Basin (JVs), Coastal Program - Great Lakes (Coastal) in coordination and collaboration with numerous stakeholders within the Great Lakes conservation community including States, local municipalities, private landowners, local watershed groups, NGOs, and other Federal agencies. Together, partners bring matching funds and contribute habitat protection and restoration expertise. We anticipate this project will generate 30 to 50 cooperative or landowner agreements annually with non-federal partners. We have worked with more than 300 partners to implement on-the-ground restoration projects within the Basin during the past several years and have a proven record of implementing cost-effective projects that have meaningful impacts on Great Lakes fish and wildlife resources and that are of great value to the American people.

Our approach to protecting and restoring priority fish and wildlife populations will include: removing fish passage barriers, stabilizing stream banks, improving in-stream habitat, and restoring and protecting wetland and upland areas of value to migratory birds, listed species, and other wildlife. Projects in all programs are specifically chosen based on known impediments to species survival, restoration of degraded habitats, and protection of key areas providing wildlife corridors. Coastal biologists are currently focusing their efforts on identifying limiting factors, such as habitat availability, and taking action to improve populations of key Great Lakes species, including lake sturgeon and piping plover. Joint Venture Coordinators are working with partners to target objectives in their Implementation Plans focused on priority bird species. Fish passage biologists are working on the landscape to identify and remove known impediments to movement of aquatic organisms. All four programs will work closely with partners to apply these priorities and other decision tools to identify watershed areas most in need of protection and restoration. These actions will reconnect aquatic and terrestrial habitats, reduce sediment and nutrient inputs, restore natural hydrologic regimes, improve water quality, and increase populations of lake sturgeon, brook trout, migratory birds, and threatened and endangered species within Great Lakes tributaries and associated habitats. Restoring and protecting key watersheds and tributaries will also strengthen resilience within the Great Lakes ecosystem to withstand future stressors, such as climate change.

For activities conducted through grants to collaborators, the Service's Requests for Proposals are including/will include language emphasizing projects that target efforts within Areas of Concern or that would reduce excessive phosphorus inputs into a watershed, in recognition of the Interagency Task Force's priority on Areas of Concern and phosphorus reduction.

Milestones:

February – March 2012	Project identification
April 2012 – Sept 2013	Project implementation

Great Lakes Action Plan Measure of Progress:

This project will contribute to achieving a number of GLRI Action Plan measures identified in Focus Area 4 - Habitat and Wildlife Protection and Restoration, including:

Miles of rivers reopened for fish passage (Measure No. 1): 151 stream miles opened to fish passage (FPP)

Number of fish passage barriers removed or bypassed (Measure No. 2): 18 fish passage barriers removed (FPP)

Number of acres of wetlands protected, restored, and enhanced (Measure No. 6): 225 (PFW); 200 acres (JV); 75 (Coastal)

Number of acres of wetland-associated uplands protected, restored, and enhanced (Measure No. 6): 225 (PFW); 100 (JV); 25 (Coastal)

Contacts: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110 (Fish Passage Program); Barbara Pardo, barbara_pardo@fws.gov, (612) 713-5433 (Joint Venture Program); Lori Nordstrom, lori_nordstrom@fws.gov, (612) 713-5475 (Partners for Fish and Wildlife Program); Craig Czarnecki, craig_czarnecki@fws.gov, (517) 351-8470 (Coastal Program)

Title: Conservation of Great Lakes Islands and Coasts (Template No. 2012-032)

Funding: \$400,000

Authority: Fish and Wildlife Coordination Act

Work: Great lakes islands form the world's largest freshwater island system and are a unique natural resource. Islands provide habitats for rare and threatened and endangered species, serve as colonial bird nesting sites, and are important stopover sites for migratory birds. Additional inventory work is needed to identify island locations where these species and associated resources occur and are in most need of protection. The Service will use project funds to deploy its medium format digital camera system and aircraft to conduct land cover mapping, locate colonial water bird nest sites, and target islands for in-depth resource inventory of vegetation and wildlife. Results of this study, which will include land cover maps and associated resource information, will be used, in cooperation with other efforts, to prioritize islands for acquisition and to develop management plans for islands.

Another component of this project is acquisition of islands and/or coastal tracts by the Service to provide permanent protection and conservation of the previously described wildlife and habitat resources. The Service currently owns 20 islands in Lakes Michigan, Huron, Superior, and Erie as part of the National Wildlife Refuge (NWR) System. Currently one island tract (Charity Island) and multiple coastal tracts (ranging in size from 14 to 70 acres) are being evaluated for acquisition (total acres conserved will vary with appraised land values).

The final component of this project is restoration of coastal habitats at Shiawassee NWR and Ottawa NWR. The Service has identified restoration projects that would include water quality improvement, improving/reconnecting natural hydrology to Turtle Creek (70 acres), Toussaint River (171 acres), and Lake Erie, and improving coastal wetland, forest, and wet meadow habitats adjacent to the Toussaint River and Turtle Creek (specific projects would be undertaken only if land acquisition efforts are unsuccessful).

Milestones:

Spring and summer 2012	Flights for water bird and vegetation monitoring
Late summer to fall 2012	Data analysis and summary
September 2012	Complete property acquisition

Great Lakes Action Plan Measure of Progress: Activities conducted under this template will contribute to overall achievement of several GLRI Action Plan measures identified in Focus Area 4 - Habitat and Wildlife Protection and Restoration, including: number of acres of wetlands and wetland-associated uplands protected, restored, and enhanced (Measure No. 6) and number of acres of coastal, uplands, and island habitats wetlands and wetland-associated uplands protected, restored, and enhanced (Measure No. 7) - 241 acres targeted, see above.

Contact: Matt Sprenger, matt_sprenger@fws.gov, (612) 713-5327

Title: Upper Midwest and Great Lakes Landscape Conservation Cooperative (UMGL LCC)
(Template No. 2012-034)

Funding: \$500,000

Authority: Multiple authorities, including, Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Partners for Fish and Wildlife Act; Endangered Species Act of 1973, as amended; Migratory Bird Treaty Act; and others

Work: The UMGL LCC, with both U.S. and Canadian participants, will identify conservation needs common to all organizations and identify and produce tools and products that help inform decision making and on-the-ground action taken by individual organizations. Of greatest importance across the basin are anticipated impacts of climate change, but there are many others, e.g., off-shore development of wind farms, habitat fragmentation, and exotic/invasive species. Overall, the LCC will assist habitat-based programs functioning as a science nexus to synthesize data, apply biological models, and develop decision support tools to better guide on-the-ground conservation efforts. All work is directed by a Steering Committee made up of executive leaders of the conservation community. In FY2012, this project expects to provide approximately \$480,000 to continue projects selected by the conservation community to assist targeted, on the ground conservation. Project work will include the following:

- Identify the most climate vulnerable terrestrial species and natural communities in the Great Lakes
- Develop Fish Trophic Interaction Indicators of Climate Change for the Great Lakes
- Reestablish ecological connectivity between the Great lakes and their tributaries

The UMGL LCC serves as a venue for the conservation community. Currently, participants include 9 States, 2 provinces, 9 Federal agencies, and multiple nongovernmental organizations, partnerships, and commissions. See www.GreatLakesLCC.org for full information on work products.

Milestones: Continue projects initially funded in FY2011.

Great Lakes Action Plan Measure of Progress: Overall, this work supports all measures within Focus Area 4 - Habitat and Wildlife Protection and Restoration, specifically providing critical information to protect the habitats in the great lakes that are most important for maintaining self-sustaining fish and wildlife populations. Providing technical and scientific support to all members of the conservation community remains the fundamental purpose as State and Federal agencies, along with other critical organizations, join together to decide exactly what tools are needed to better design and execute our shared conservation priorities. In essence, each effort helps identify the most-needed actions in the highest priority areas, which increases the overall quality of projects identified and funded through the GLRI and other sources. The results of efforts of the LCC will improve the success of conservation actions planned and implemented by all stakeholders and lead to greater cost-effectiveness. The LCC projects directly address recommendations of the Science Advisory Board.

Specifically, the ecological connectivity project will provide specific guidance for restoration at individual watershed and basin-wide scales, refine methodologies for spatial analysis of barriers, and provide a systematic framework for comparing costs (direct economic costs, species invasions) and benefits (connectivity, focal fish species) of barrier removal. Projects implemented in FY2012 will facilitate the protection of over 500 acres of coastal and riparian habitat in the Great Lakes.

Contacts: Craig Czarnecki, craig_czarnecki@fws.gov, (517) 351-8470; Brad Potter, bradly_potter@fws.gov, (517) 351-4213

Title: Great Lakes Wind Power: Making it Migratory Bird and Bat-friendly (Template No. 2012-036)

Funding: \$500,000

Authority: Migratory Bird Treaty Act; Bald and Golden Eagle Protection Act; Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Endangered Species Act of 1973, as amended.

Work: The shorelines of the Great Lakes provide excellent wind resources for wind development as do the waters and islands of the Great Lakes. However, the shorelines and pelagic areas are also major migration routes for many bird and bat species. Conservation and management agencies need better information regarding shoreline migration corridors, utilization of Great Lakes islands by migrants and breeding birds, and migration and use over open water (pelagic) areas.

The purpose of this project is to identify areas where wind energy could be developed safely and areas where it is likely to have serious adverse impacts on birds and/or bats. The knowledge gained would also be useful for identifying important areas and habitats for migrating birds and/or bats that are adversely affected by other types of development. It would help to identify key areas throughout the Great Lakes that are critical to the many bird and bat species that migrate across and around the Great Lakes. This project addresses issues raised in the Upper Mississippi Valley/Great Lakes Water Bird Conservation Plan and Upper Mississippi River and Great Lakes Joint Venture Implementation Plan.

Information from this project will guide decision-makers in siting and operating wind power facilities in a way that minimizes the likelihood of bird and/or bat collisions with wind turbines and associated structures. For shoreline surveys, avian marine radar coupled with acoustic/ultrasonic monitors will be utilized to survey avian and bat migration for approximately a three-mile distance inland from Great Lakes shorelines. Data obtained from the surveys will be analyzed and incorporated into a spatial model to predict areas of relatively high and low risk for birds and/or bats, relative to wind power development. These data will be shared with State departments of natural resources, State Power Siting Authorities, Federal regulatory agencies (such as the Corps of Engineers), Great Lakes Wind Collaborative, and other partners to aid in siting wind power projects to protect migratory birds. Specifically, meetings will begin to be scheduled with State DNRs and regulatory agencies in the spring of 2012 to share preliminary results to facilitate environmentally sustainable project siting. Finally, data from the studies will identify areas where further analysis is necessary to ensure that wind power is developed in a manner protective of migratory birds and bats.

This project addresses migratory birds and bats migrating or moving through the Great Lakes Basin at the population (continental) scale. Although the state of the science does not allow establishment of a direct relationship between population level effects of avoidance of impacts to migratory birds and bats at individual wind projects, this GLRI-funded project is significant nonetheless as it is the *only* basin-wide, multi-faceted project identifying sensitive areas for migratory birds and bats to help inform wind power project siting decision-making.

Milestones:

September 2012	Continue fall survey
FY 2013	Continue data analysis
November 2012	End fall survey
Winter 2012	Receive reports from 5 grants (2010 funds)
March 2013	Begin spring survey
June 2013	End spring survey

Measure of Progress: Results of this project will contribute to achievement of the *Number of acres of coastal, upland, and island habitats protected, restored and enhanced*. The ultimate intent of this project is to identify buffer zones along the landward side of the Great Lakes. We will identify areas as migration corridors and/or concentration areas that should be avoided for wind development or where additional studies and special operational restrictions will probably be necessary. Based upon the U.S. shoreline of the Great Lakes, and depending upon the appropriate width of the buffer zones, it is reasonable that we will identify between 5,000 and 25,000 square miles of shoreline for protection in the Great Lakes.

Contact: Jeff Gosse, jeff_gosse@fws.gov, (612) 713- 5138

Title: Great Lakes Basin Fish Habitat Partnership (Template No. 2012-037)

Funding: \$400,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act

Work: The Great Lakes Basin Fish Habitat Partnership (Partnership) is a recognized partnership under the National Fish Habitat Action Plan. Work is focused on restoring fish habitats and ecosystem functions that will sustain and restore fishery populations in the Great Lakes Basin. The Partnership is addressing population declines and habitat loss through watershed restoration activities. Primary actions the Partnership will undertake restore and protect fish habitat across the Great Lakes Basin. The Service coordinates the Partnership's activities and projects.

The Partnership will provide funding for on-the-ground habitat restoration, which will include: restoration of large woody debris in floodplains and streams; removal of dams; replacement of barrier culverts; stormwater management improvement; restoration of wetlands that slow overland flow; restoration and protection of spawning and nursery habitats; and, restoration of forested edges in riparian areas. Most of this work will be done cooperatively with local, State, tribal and other partners who will receive funding through grants or cooperative agreements. These partners contribute matching funds, expertise, and in-kind support for projects.

The Partnership will utilize the basin-wide fish habitat assessment it completed in 2011 to select the most effective projects in the geographic locations of greatest need. The Partnership will also work cooperatively with the Upper Midwest-Great Lakes Landscape Conservation Cooperative to identify priority areas and projects that meet Partnership goals and adapt to climate change.

Milestones:

September 2011	Request for Proposals (already released)
May 2012	Projects selected and approved
September 2012	Cooperative Agreements signed
March 2014	Projects Completed

Great Lakes Action Plan Measure of Progress:

This project contributes to achievement of a number of GLRI Action Plan measures in Focus Area 4 - Habitat and Wildlife Protection and Restoration, depending upon projects selected for funding. Specifically, this project will contribute:

- 10 miles of rivers reopened for fish passage and 2 miles of stream with restored ecological function (Measure No. 1)
- Several fish passage barriers removed or bypassed (Measure No. 2)
- 100 acres of wetlands and wetland-associated uplands protected, restored, and enhance (Measure No. 6); and others.

Contact: Mark Brouder, mark_brouder@fws.gov, (715) 682-6185

Title: *Sustain Our Great Lakes* Grant Program - Habitat (Template 2012-155)

Funding: \$2,647,744

Authority: Clean Water Act Section 118

Work: The *Sustain Our Great Lakes* (Habitat) Program supports habitat restoration and enhancement projects that help improve ecological condition of the Great Lakes Basin. Projects will further the goals of the GLRI and goals of States, Tribes, municipalities, non-governmental organizations, and universities. The *Sustain Our Great Lakes* Program is a public-private partnership among ArcelorMittal, National Oceanic and Atmospheric Administration, National Fish and Wildlife Foundation (overall program coordinator), Natural Resources Conservation Service, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S. Forest Service.

The *Sustain Our Great Lakes* Program supports habitat restoration and enhancement in the Great Lakes basin by awarding competitive grants for on-the-ground projects. Eligible applicants include: non-profit 501(c) organizations; State, tribal and local governments; and educational institutions. To be eligible for grant funding, projects must 1) occur within the Great Lakes Basin and 2) direct the majority of grant funding toward on-the-ground habitat restoration. Funding is not provided for land protection, i.e., acquisition and easement, rain barrels, rain gardens, green roofs, or research. Projects that seek funding for political advocacy, lobbying, litigation, fundraising, or legally mandated mitigation projects are not eligible.

Grant funding is directed toward projects that improve the quality and connectivity of stream, wetland and coastal habitat through the following four action categories:

- Restoration of aquatic connectivity
- Stream and riparian habitat restoration
- Wetland restoration
- Near-shore/shoreline habitat restoration

Within those four priority action categories, preference will be given to projects that 1) benefit species of conservation concern; 2) accelerate BUI delisting within AOCs; 3) implement control of aquatic invasive species; 4) reduce phosphorus inputs to lakes and streams; and 5) provide technical assistance to private landowners. The most-competitive proposals will demonstrate:

- Close alignment with funding priorities
- Clear definition of activities and anticipated ecological results
- Strong technical merit
- Competitive project costs
- Experienced project teams and partner engagement
- Plans for pre- and post-implementation monitoring to document habitat improvements and other project outcomes

A panel of State, tribal and provincial reviewers and the *Sustain Our Great Lakes* advisory team will use these criteria as a strong basis for project selection; however, project selections will also be based on other considerations, such as availability of funding, geographic balance, and balance among project types. In addition, selections may be based on how activities advance goals of established watershed, regional, tribal, State, Federal, and provincial conservation plans.

After project selection, National Fish and Wildlife Foundation staff will work with applicants to prepare grant agreements and other necessary paperwork, all of which will be completed electronically using the Easygrants system. Additional information about the grantee's

organization and its finances may be solicited during this time. Preparation of grant agreements will require approximately 4 to 8 weeks after the National Fish and Wildlife Foundation receives the additional required information from the grantee. Once grant agreements are finalized, funds will be advanced to qualified grantees based on cash needs of the project; some awards may be made on a reimbursable basis. Grantees will be required to submit interim and final financial and programmatic reports.

Grantees must document compliance with the National Environmental Policy Act, Endangered Species Act, National Historic Preservation Act, and any other relevant Federal, State, and local regulations. If a project involves environmental monitoring, data collection/generation, or data use, the grantee will be asked to develop a Quality Assurance Project Plan as part of the grant (www.epa.gov/quality/qapps.html). Compliance with these regulatory requirements must be documented prior to the initiation of activities that disturb or alter habitat or other features of the project site(s).

Additional information on the *Sustain Our Great Lakes* Grant Program and partners may be found at the following links:

- *Sustain Our Great Lakes* Grant Program: www.sustainourgreatlakes.org
- ArcelorMittal: www.arcelormittal.com/usacr
- National Fish and Wildlife Foundation: www.nfwf.org
- National Oceanic and Atmospheric Administration: www.glerl.noaa.gov
- Natural Resources Conservation Service: www.nrcs.usda.gov
- U.S. Environmental Protection Agency: www.epa.gov/glnpo/fund/glf.html
- U.S. Fish and Wildlife Service: www.fws.gov/midwest/greatlakes/glcoastal.htm
- U.S. Forest Service: www.fs.fed.us

This template also supports the Service's liaison position shared with GLNPO (\$75,000). Located at GLNPO's office in Chicago, Illinois, this position engages in a variety of primary and general duties (attached) that support shared priorities of both the Service and GLNPO and add value to both agencies' activities, including the following: support efforts of the Service and GLNPO to coordinate, plan, budget, implement, and communicate aspects of the Great Lakes Restoration Initiative related to Federal trust fish and wildlife resources and their habitats; assist in identifying targets and actions to address and restore beneficial use impairments of fish and wildlife species, populations, and habitats in AOCs that will contribute to their delisting; assist in coordinating Service engagement in the review and potential re-writing of the Great Lakes Water Quality Agreement; and, provide organizational support to the State of the Lakes Ecosystem Conference (SOLEC) and facilitate execution of conference reporting.

Authorities for this position include the Great Lakes Fish and Wildlife Restoration Act of 2006, Fish and Wildlife Coordination Act, Clean Water Act, and Endangered Species Act.

Milestones:

March - June 2012	Project review and selection (pre-proposal stage included)
July 2012	Anticipated announcement of awards
August – October 2012	Grant agreements developed and regulatory compliance documented
October 2012	Initiation of project implementation

Great Lakes Action Plan Measure of Progress:

Individual projects have not yet been selected for funding, so specific anticipated outputs are not yet known. However, based on work supported through previous funding cycles, it is estimated that this new Habitat funding will contribute to the following GLRI Action Plan measures for Focus Area 4 - Habitat and Wildlife Protection and Restoration:

- Miles of rivers reopened for fish passage: 70
- Number of fish passage barriers removed or bypassed: 7
- Acres of wetlands and wetland-associated uplands protected, restored and enhanced: 800
- Acres of coastal, upland and island habitats protected, restored and enhanced: 800

Contributions of this grant program to Action Plan Measures of Progress will be aggregated with those from the *Sustain Our Great Lakes* Grant Program – Areas of Concern (Template 2012-155).

The Service will serve as an intermediary of funds to the National Fish and Wildlife Foundation.

Point of Contact: Amy McGovern, 312-886-1474, amy_mcgovern@fws.gov

Title: *Sustain Our Great Lakes* Grant Program – Areas of Concern (Template 2012-157)

Funding: \$4,417,969

Authority: Clean Water Act, Section 118

Work: The *Sustain Our Great Lakes* Areas of Concern Program supports habitat restoration and enhancement projects that accelerated the delisting of BUIs within AOCs. Projects will further the goals of the GLRI and goals of States, tribes, municipalities, non-governmental organizations, and universities. The *Sustain Our Great Lakes* Program is a public-private partnership among ArcelorMittal, National Oceanic and Atmospheric Administration, National Fish and Wildlife Foundation (coordinator), Natural Resources Conservation Service, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S. Forest Service.

This sub-grant program will meet criteria described for the *Sustain Our Great Lakes* Habitat grant program (described previously). To be eligible for consideration for this AOC sub-grant program, projects must contribute progress toward delisting of BUIs within U.S. AOCs. Preference will be given to projects identified as priorities in Stage 2 Remedial Action Plans (RAP). To this end, grant applicants at the full proposal stage will be required to submit a letter of support from the local RAP implementation group, defined as the State agency responsible for implementing the AOC program or the local public stakeholder group working with the state agency on implementing the RAP, identifying whether the proposed project is needed to achieve AOC delisting.

Milestones:

March - June 2012	Project review and selection (pre-proposal stage included)
July 2012	Anticipated announcement of awards
August – October 2012	Grant agreements developed and regulatory compliance documented
October 2012	Initiation of project implementation

Great Lakes Action Plan Measure of Progress:

Individual projects have not yet been selected for funding, so specific anticipated outputs are not yet known. However, based on work supported through previous funding cycles, it is estimated that this funding will contribute to the following GLRI Action Plan measures

- Number of BUI delisting project starts in Areas of Concern: 5

Contributions of this grant program to Action Plan Measures of Progress will be aggregated with those from the *Sustain Our Great Lakes* Grant Program - Habitat (Template 2012-155).

The Service will serve as an intermediary of funds to the National Fish and Wildlife Foundation.

Point of Contact: Amy McGovern, amy_mcgovern@fws.gov, (312) 886-1474

Title: State and Tribal Aquatic Nuisance Species Management (Template No. 2012-189)

Funding: \$7,500,000 USFWS (\$500,000 BIA)

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: This project supports approved (by Aquatic Nuisance Species Task Force) State and Interstate Aquatic Nuisance Species Management Plans, enhancement of state planning for rapid response actions, and implementation of actual rapid response actions or mock rapid response exercises by States. (This project does not include Asian Carp Framework support for Illinois Department of Natural Resources to implement Asian carp-related activities under their State Aquatic Nuisance Species Management Plan. It also does not include \$500,000 originally provided to the Service for Tribal Plans to be allocated by the Bureau of Indian Affairs (BIA); instead, \$500,000 is being directed directly to BIA, as was done in FY2011, to support grants to Tribal entities.)

Milestones: All grants agreements will be delivered to the States, for approval and signature by, August 31, 2012.

Great Lakes Action Plan Measure of Progress:

The Service will support on-the-water implementation of the 8 Great Lake State and Interstate Aquatic Nuisance Species Management Plans approved (by Aquatic Nuisance Species Task Force). This project will directly support achievement of several Invasive Species Focus Area measures, including the rate of nonnative species newly detected in the Great Lakes ecosystem (Measure No. 1); More than 500 acres managed for populations of invasive species controlled to target level (Measure No. 2); and, number of recreation and resource users contacted on best practices that prevent the introduction and spread of invasive species (Measure No. 3)

The States and tribes are best positioned to help reduce the rate of introductions of aquatic invasive species into the Great Lakes and to control and contain aquatic invasive species established there. The State of Illinois has been a leader in efforts to protect the Great Lakes from invasion of Asian carps via the Chicago Area Waterways System.

Contact: Mike Hoff, michael_hoff@fws.gov, (612) 713-5114

Title: Mass Marking of Great Lakes Trout and Salmon (Template No. 2012-305)

Funding: \$1,500,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Act of 1956; Fish and Wildlife Coordination Act; Great Lakes Fishery Act of 1956.

Work: This project will result in the tagging of 4.5 million lake trout and 4.3 million Chinook salmon stocked into Lakes Michigan and Huron, and will provide assistance to the Service's Region 5 (lower Great Lakes) to tag 1.0 million lake trout in Lakes Ontario and Erie. This project will also assist states in tag recovery in Lakes Michigan and Huron. Through this project, the Service will fund projects that develop and implement, with state and tribal partners, experimental designs that tag specific lots Chinook salmon and lake trout to evaluate their movements, relative survival, and other population demographics needed to manage predator demand, measure rates of natural reproduction, and manage harvest on populations under rehabilitation.

Marking all trout and salmon stocked into the Great Lakes will provide critical information on the Lakes' fish communities, i.e., contributions of stocked and wild (those without tags) trout and salmon, required by Federal, State, and tribal fishery managers to achieve balance between predators and prey, achieve native species restoration, control invasive non-native alewives, and maintain the estimated annual \$7 billion economic benefit from Great Lakes fisheries to the American people.

The Service's Great Lakes Mass Marking Laboratory ultimately seeks to implant coded-wire-tags in and adipose fin-clip all 25 million trout and salmon stocked annually into the U.S. Great Lakes, assist in recovery of tagged fish caught by sport and commercial fishers, manage a basin-wide database of stocking and recapture records, and provide data analyses. Full program implementation of the mass marking program will require an additional \$4.9 million to complete equipment purchases and an annual operational budget of \$5.9 million.

Milestones:

October 2011 - May 2012	Order tags and other equipment
February - April 2012	Recruit temporary staff
March - April 2012	Tag Chinook salmon at 8 state hatcheries in MI, WI, IL, IN
May - September 2012	Process tag recoveries
July - September 2012	Tag lake trout at 3 federal hatcheries and one state hatchery
April - September 2012	Recover tagged fish in IL, MI, IN, WI

Great Lakes Action Plan Measure of Progress:

This project will contribute to Habitat and Wildlife Protection and Restoration Focus Area Measure No. 5, as mass marking will lead to management decisions and actions that will increase the percentage of native non-threatened and endangered species that are self-sustaining in the wild.

Points of Contact: Charles Bronte, charles_bronte@fws.gov, (920) 866-1761

Title: Lakewide Management Plan (LaMP) Coordination and Implementation (Template No. 2012-331)

Funding: \$150,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act

Work: The Service's expertise, capacity, and support for the Great Lakes Lakewide Programs will be focused on implementation of LaMPs and their associated goals, objectives, and targets for Lakes Superior, Michigan, Huron, Erie and Ontario. This work will include participation in LaMP processes, programs, conferences, workshops, and projects, including development of LaMP documents and updates. Specifically, Service staff will participate in and serve on workgroups and technical committees, including attending meetings and workshops. The Service will also participate in management-level meetings and committees. In addition, the Service will undertake and participate in interagency actions that implement LaMP programs and priorities, including helping to incorporate LaMP goals into Service planning efforts. Funding will be used to support the following LaMP-specific efforts:

- Lake Superior Lakewide Management Plan- support continued leadership as co-chair of the Aquatic Community Committee of the Superior Work Group and data synthesis, analysis, and reporting from 2011 CSMI activities
- Lake Michigan Lakewide Management Plan - support (1) term biologist hired to coordinate and implement high-priority LaMP actions
- Lake Erie Lakewide Management Plan - support (1) Lower Lakes term biologist to coordinate and implement high-priority LaMP actions
- Lake Ontario Lakewide Management Plan – *see Lake Erie*

Milestones:

Ongoing Implementation of priority LaMP actions
Ongoing Participation in LaMP meetings and events

Great Lakes Action Plan Measure of Progress: The project will contribute to achievement of 5 priority LaMP projects (Measure No. 2) in FY2012. Focus Area 5 – Accountability, Education, monitoring, Evaluation, Communication and Partnerships. Project outputs will indirectly support and contribute to achievement of a variety of measures in other GLRI Focus Areas, as well.

Contact: Mark Brouder, mark_brouder@fws.gov, (715) 682-6185 (Lake Superior); Mark Holey, mark_holey@fws.gov, (920) 866-1760 (Lake Michigan); Kofi Fynn-Aikens, kofi_fynnaikins@fws.gov, (716) 691-5456 (Lakes Erie and Ontario)

Title: Asian Carp Framework Projects - USFWS (Template No. 2012-671)

Funding: \$3,122,322

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The Service and partners will implement the *2012 Asian Carp Control Strategy Framework* (<http://asiancarp.us/documents/2012Framework.pdf>)

Framework Action Items:

- 2.1.2 – Monitoring (electrofishing) and rapid response team support (\$650,000)
- 2.1.3 – Support for Asian carp rapid response in the Great Lakes Basin (\$700,000)
- 2.4.4 – Ecological/biological risk assessments (\$500,000)
- 2.5.3 – Research on the impacts of potential Asian carp vectors being a source of fish or eDNA movement in the CAWS (\$50,000)
- 2.6.4 – USFWS Region 3 Fisheries capacity of eDNA processing (\$460,000)
- 2.6.5 – eDNA genetic marker development (\$100,000)
- 2.7.2 – Increased Lacey Act enforcement of illegal transport of injurious wildlife (\$400,000)
- 2.7.4 – Public outreach through website development (\$50,000)
- 2.7.8 – USFWS early detection workshop (\$30,000)
- 2.8.4 – USFWS Great Lakes Asian Carp Monitoring Program (\$150,000)
- 2.9.1 – Salary support for Special Assistant to Carp Director Goss (\$32,322)

Milestones:

See Action Items, above

Great Lakes Action Plan Measure of Progress: Directly supports long-term invasive species Goal 4 identified in the Action Plan: “Goal 4: A comprehensive program for detection and tracking newly identified invasive species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions.” Directly supports long-term invasive species Goal 5 identified in the Action Plan: “An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation.”

Enhanced monitoring under this template will contribute information to assess the metric: “Number of nonnative species newly detected in the Great Lakes ecosystem.”

The program addresses one of nine priorities of the Council of Great Lakes Governors. The program also supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

Contact: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110, Michael Hoff, Michael_Hoff@fws.gov, (612) 713-5114, Chuck Traxler, Charles_Traxler@fws.gov – Website contact.

Title: Asian Carp Framework Projects – IL DNR (Template No. 2012-672)

Funding: \$5,787,417

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The USFWS will direct funding through the existing cooperative agreement with the State of Illinois for implementation of the *2012 Asian Carp Control Strategy Framework* (<http://asiancarp.us/documents/2012Framework.pdf>)

Framework Action Items:

2.1.1 – Enhanced monitoring efforts of the electric barrier system (\$2,257,417)

2.2.1 – Commercial fishing for removal below Lockport pool (\$1,200,000)

2.2.2 – Illinois River stock assessment/management alternatives (\$1,300,000)

2.5.15- Develop alternate designs to enhance Asian Carp capture rates (\$600,000)

2.7.1 – Investigation of Northeast Illinois' bait shops (\$30,000)

2.7.3 – Community action initiatives (\$400,000)

Milestones:

See Action Items, above

Great Lakes Action Plan Measure of Progress: Directly supports long-term invasive species Goal 4 identified in the Action Plan: “Goal 4: A comprehensive program for detection and tracking newly identified invasive species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions.” Directly supports long-term invasive species Goal 5 identified in the Action Plan: “An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation.”

Enhanced monitoring under this template will contribute information to assess the metric: “Number of nonnative species newly detected in the Great Lakes ecosystem.”

The program addresses one of nine priorities of the Council of Great Lakes Governors. The program also supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

Contact: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110, Michael Hoff, Michael_Hoff@fws.gov, (612) 713-5114, Chuck Traxler, Charles_Traxler@fws.gov – Website contact.

4. COLLABORATIVE ARRANGEMENTS

The Service will implement its GLRI projects in close collaboration with a wide range of partners. Collaboration will range from providing technical assistance to partners; providing the Service's GLRI funds to collaborators through intra- and interagency agreements, e.g., Service agreement with the National Fish and Wildlife Foundation to manage the *Sustain our Great Lakes* Habitat and AOC grant programs, and cooperative agreements to conduct high priority work; participating on project review panels/committees to identify with partners recipients of GLRI grant funds, e.g., *Sustain our Great Lakes* Habitat and AOC grant programs; and apply provisions of State Aquatic Nuisance Species Management Plans under which grants for these activities are issued.

5. FUNDING SUMMARY SPREADSHEET

See attached Funding Summary Spreadsheet

Attachment 1: Summary of Duties of the U.S. Fish and Wildlife Service (Service) Liaison to the U.S. EPA Great Lakes National Program Office (GLNPO); (IA Template 2012-155)

PRIMARY DUTIES

- Assist in identifying actions and targets for addressing and restoring beneficial use impairments of fish and wildlife species, populations, and habitats in Great Lakes Areas of Concern that will lead to delisting. This will be accomplished by coordinating with Service personnel and partners to provide sound technical assistance and advice and to identify resources and opportunities for on the ground restoration actions.
- Support efforts of the Service and GLNPO by assisting in coordinating, planning, and implementing aspects of the Great Lakes Regional Collaboration related to Federal trust fish and wildlife resources and their habitats.
- Provide support to the Service's Great Lakes Coastal Program, including information exchange, advocacy, partnership development, and program development.
- Assist GLNPO and Environment Canada in coordinating the implementation phase of the Great Lakes Coastal Wetlands long-term monitoring program.
- Assist in coordinating Service engagement in the review and potential re-writing of the Great Lakes Water Quality Agreement (see Great Lakes Water Quality Agreement below for more detail) by serving as a point of contact to ensure that issues related to Federal trust fish and wildlife resources and their habitats are identified and considered. This may include helping coordinate and, possibly, leading the Service's engagement on the Cross-cutting Issues, Monitoring, and Special Issues Working Groups in the review of the Great Lakes Water Quality Agreement.
- Participate in weekly GLNPO staff meetings to facilitate the flow of information between the two agencies.
- Participate in the development of State of the Lakes Ecosystem Conference (SOLEC) indicators so that indicators related to Federal trust fish and wildlife resources and their habitats are considered. This will be accomplished by working with the Service's representative(s) on the SOLEC Steering Committee and participating on SOLEC indicators work groups, as appropriate.

GENERAL DUTIES

Service

- Serve as a Service point of contact for GLNPO regarding Federal trust fish and wildlife matters in the Great Lakes, particularly with the implementation and funding coordination of the GLRI.
- Advocate for the Service's mission and priorities and Federal trust fish and wildlife resources and their habitats, in general, in the Great Lakes.
- Communicate and coordinate with pertinent Service programs in field offices (project leaders and staff) and RO staff and management to identify opportunities for the Service to carry out its mission effectively and efficiently in the Great Lakes, such as through establishment of new partnerships, more efficient ways to approach fish and wildlife restoration, leveraging funding resources, identifying connections among Service programs, identifying opportunities for the Service to engage to address the Service's mission and priorities, etc.
- Share information on Service positions, policies, contacts for specific issues, etc., within the Service and with GLNPO.

- Serve as a point of contact for the Service, as appropriate, among Great Lakes U.S. and Canadian agencies and nongovernmental organizations.
- Serve as a bridge between Great Lakes programs and activities in the Service's Regions 3 (Upper Great Lakes) and 5 (lower Great Lakes and St. Lawrence River), as well as with the Washington Office, to ensure Great Lakes issues are addressed holistically across regional boundaries, as appropriate.
- Assist in coordinating the identification and compilation of pertinent Service information for inclusion in various reports and briefing documents, such as the Great Lakes Reports to Congress, International Joint Commission reports, SOLEC, Great Lakes Collaboration, and others.
- Identify and pursue opportunities to use and expand on development of products of the Service's National Wetland Inventory in the Great Lakes.
- Assist in planning and conducting outreach efforts, including those with Congress, as appropriate.
- Seek opportunities and provide support to efforts to connect people to nature, including working with External Affairs.
- Prepare or coordinate, as appropriate, preparation of responses to inquiries and requests for information.

GLNPO

- Participate as a team member on the GLNPO Ecological Protection and Restoration (E Team), Emerging Issues, and Invasive Species teams and educate GLNPO management and staff on pertinent Service efforts.
- Communicate and coordinate with pertinent GLNPO staff with respect to NRDA and Great Lakes Legacy Act project developments.
- Serve as an EPA point of contact for the Service regarding Federal trust fish and wildlife matters in the Great Lakes, particularly with the implementation and funding coordination of the GLRI.

Other agencies and organizations

U.S. Policy Committee

- Support the U.S. Policy Committee by contributing ideas for meeting agenda topics and other input to the Service's representative and alternate, upon request, to ensure that appropriate issues associated with Federal trust fish and wildlife resources and their habitats are considered.
- Support progress report updates on the Great Lakes Strategy 2002.

Great Lakes Water Quality Agreement

- Help coordinate the Service's participation in Lakewide Management Plans, Lake Michigan Monitoring Council, Wildlife Committee, Lake Erie LaMP Work Group, and Wildlife, Habitat, and Ecosystem Objectives Committees, as appropriate.

Great Lakes Commission

- Provide support to the Service's point of contact to the Great Lakes Commission and interact with Commission staff to plan and implement projects related to Federal trust fish and wildlife resources and their habitats.

Great Lakes Regional Collaboration

- Provide support to the Service's lead(s) for the Great Lakes Watershed Restoration Grant Program.
- Participate and help coordinate activities as a Service representative on the Habitat/Species, Monitoring, and Indicators Regional Collaboration Strategic Teams.

Midwest Natural Resources Group

- Provide support to the Service representative to the Midwest Natural Resources Group, including participating on planning committees and the Great Lakes Focus Area Committee, as appropriate, on behalf of Federal trust fish and wildlife resources in the Great Lakes.

Great Lakes Botulism Coordination Network

- Help coordinate the Service's participation in Network development and communication efforts.

Attachment 2: Crucian Carp (*Carassius carassius*) Ecological Risk Screening Summary
USFWS, February 2011.

7/5/2012

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Great Lakes Restoration Initiative
Project Funding Summary Spreadsheet
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Focus Area 4: Nearshore Health and Nonpoint Source Pollution														
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